EXHIBIT A

CURRICULUM VITAE

Daniel W. Berland, MD, FACP
Emeritus Clinical Associate Professor of Medicine
Division of General Internal Medicine
Department of Internal Medicine
University of Michigan
3305 Taubman Center, SPC 5352
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Ann Arbor, MI 48109
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Education and Post-Doctoral Training

9/1973-5/1977	University of Michigan, Ann Arbor, MI; B.S. with Honors (Zoology and Microbiology); May, 1977
7/1977-6/1980	Ohio State University College of Medicine, Columbus, OH; M.D. June, 1980
7/1980-6/1981	Henry Ford Hospital, University of Michigan Affil., Detroit, MI; Categorical Internal Medicine (Intern)
7/1981-6/1983	Henry Ford Hospital, University of Michigan Affil., Detroit, MI; Categorical Internal Medicine (Resident)

Certification and Licensure

1978-1980	Diplomate, National Board of Medical Examiners – Parts I-III
9/1983-present	American Board of Internal Medicine (#092734)
8/1983-2008	Physician and Surgeon, State of Illinois (#036-066835)
8/2006-present	Physician, State of Michigan (#4301088824)
6/2007	Buprenorphine Training and Certification Course
12/2008-present	American Board of Addiction Medicine (#626449)

Academic, Administrative and Clinical Appointments

Academic Appointments/Positions	
8/1983-8/1984	Staff Physician – Michael Reese Hospital and Health Plan

8/1983-8/1984	Staff Physician – Michael Reese Hospital and Health Plan, Chicago, IL
9/1984-9/1985	Instructor of Clinical Medicine, Department of Medicine, University of Chicago Pritzker School of Medicine, Chicago, IL
9/1985-9/1993	Assistant Professor of Clinical Medicine, Department of Medicine, University of Chicago Pritzker School of Medicine, Chicago, IL
9/1993-6/1996	Associate Professor of Clinical Medicine, Department of Medicine, University of Chicago Pritzker School of Medicine, Chicago, IL
7/1997-12/2005	Clinical Associate Professor of Medicine, Department of Medicine Rosalind Franklin School of Medicine and Science (formerly, The Chicago Medical School), North Chicago, IL
3/2005-12/2005	Visiting Associate Professor of Clinical Medicine, Department of Medicine, University of Illinois Medical School, Chicago, IL
9/2006-8/2017	Clinical Assistant Professor of Medicine, Division of General Internal Medicine, Department of Medicine, University of Michigan, Ann Arbor, MI
3/2008-9/2017	Clinical Assistant Professor of Medicine, Department of Anesthesiology, University of Michigan, Ann Arbor, MI
9/2017-12/2020	Clinical Associate Professor of Medicine, Depts. Of Medicine and Anesthesiology, University of Michigan, Ann Arbor
1/2021-present	Emeritus Associate Professor of Medicine, Dept. of Medicine, UM

Clinical and Administrative Appointments

9/1985-6/1988	Director, University of Chicago General Internal Medicine Consultation Service
9/1986-6/1993	Director, University of Chicago Anticoagulation Clinic
3/1990-6/1995	Residency Program Director, University of Chicago B Programs in Categorical, Preliminary and Transitional Medicine at Weiss Hospital, Chicago, IL

3/1990-6/1995	Coordinator, Univ. of Chicago/Weiss Medicine Training Affiliation
9/1995-5/1996	Course Director, UC Physical Diagnosis course at Weiss Hospital Chicago, IL
7/1996-10/2003	Director of Inpatient Medicine Services, Mount Sinai Hospital, Chicago, IL
7/1996-10/2003	Associate Residency Program Director/Site Coordinator, Chicago Medical School Internal Medicine Residency Program
4/1998-10/2003	Director, Pain Consultation Service, Mount Sinai Hospital
10/1999-10/2003	Director, Anticoagulation Center, Mount Sinai Hospital
11/2003-12/2005	Director, Performance Improvement, Department of Medicine, Illinois Masonic Hospital, Chicago, IL
1/2004-12/2005	Director, Anticoagulation Clinic, Illinois Masonic Hospital
9/2006-8/2017	Clinical Assistant Professor of Medicine, University of Michigan
9/2007-6/2015	Orders Management Project (Computerized Physician Order Entry) Physician Executive
3/2008-8/2017	Clinical Assistant Professor, Anesthesiology Back and Pain Center, University of Michigan

Academic Interests

Pain and opioid therapy management; prescription drug addiction

Clinical pathways development, computerized physician order entry and improving practice quality

Grants (current and past)

09/2020-10/2024 Reframing Optimal Management of Pain and Opioids in Older Adults.

AHRQ-DHHS-US- 20-PAF05277. (Principal Investigator: Daniel

Berland) \$2,049,983

09/2017-10/2020 Past: Community Interventions to Reform Prescribing and

Prevent Opioid Abuse in Detroit and Wayne County. US Dept. of Health and Human Services, Office of Minority Health. (Principal

Investigator: Daniel Berland) \$349,978

10/2019-04/2020 Past: The Michigan Opioid Collaborative: A Training and Support

Program for Clinicians Treating Opioid Use Disorders. SubK SAMHSA-DHHS-US through a consortium with MDHHS- 20 PAF03692. Co-I with Effort (Principal Investigator: Amy S B

Bohnert) \$196,307

01/2020-10/2023 Past: Michigan Opioid Collaborative BCBSM. 20-PAF01412.

Co-I with Effort (Principal Investigator: Amy S B Bohnert)

\$1,499,176

Honors and Awards

1977 B.S. Honors in Zoology, University of Michigan, Ann Arbor, MI

1977 B.S. "With Distinction" in Microbiology, University of Michigan, Ann

Arbor, MI

1978 College of Medicine Physiology Award, Ohio State University,

Columbus, OH

1997-present Fellowship, American College of Physicians

2008-2020 Various Patient Safety and "You're Super" awards, UM

2016-2020 Fellowship, American Society of Addiction Medicine

Membership in Professional Societies

1987-present Fellow, American College of Physicians (#00189973)

2007-2020 American Society of Addiction Medicine (#626449)

Editorial and Peer-Review Service

Manuscript reviewer/Editor

2003 *JAMA*

2015-present Prescriber's Letter and Pharmacists' Letter

Peer Review	
1989-1996	Certified Reviewer for PRO, Crescent Counties Foundation for Medical Care, Chicago, IL
Teaching	
9/1984-6/1996	Attending, General Internal Medicine Inpatient Services, University of Chicago Hospital
9/1984-6/1993	Attending, General Internal Medicine Resident Clinics, University of Chicago Hospital
7/1987-6/1993	Attending, Junior Student Medicine 303, University of Chicago
9/1984-5/1996	Attending, Physical Diagnosis Course, University of Chicago
4/1990-6/1996	Attending, Morning Report, University of Chicago/Weiss Hospital
4/1990-5/1996	Attending, Medicine Inpatient Services, University of Chicago/Weiss
4/1990-6/1996	Lecturer, Various topics (including Consultation Medicine, Medical Informatics, Diabetes, Acid-Base analysis, Fluid and Electrolyte Management, Pain Management, Career Planning), University of Chicago Program B/ Weiss Hospital Lecture Series
7/1992-6/1995	Moderator, Journal Club, University of Chicago/Weiss Hospital
7/1993-6/1996	Attending, General Internal Medicine Resident Clinics, University of Chicago/Weiss Hospital
6/1992-6/1996	Pre-residency training course for University of Chicago Program B/Weiss residents
7/1996-10/2003	Attending Physician, General Internal Medicine Inpatient Services, Chicago Medical School, Mount Sinai Hospital, Chicago, IL
7/1996-6/2002	Medicine Core Clerkship Course instructor, Chicago Medical School
7/1996-10/2003	Attending Physician, Resident Clinics at Mount Sinai Hospital
9/1996-4/2003	Attending, Physical Diagnosis Course, Chicago Medical School
7/1996-10/2003	Attending and Curriculum Coordinator, Intern Report, Chicago Medical School Residency Program

1996-2003	Lecturer, Various topics (including Consultation Medicine, Medical Informatics, Diabetes, Acid-Base analysis, Fluid and Electrolyte Management, Pain Management, Career Planning) Mount Sinai Hospital and Chicago Medical School
1999-2002	Guest Medicine Attending, Surgery Morning Report, Chicago Medical School Department of Surgery (monthly)
11/2003-12/2005	Attending, Internal Medicine Inpatient Services, Illinois Masonic Hospital, Chicago Medical School and University of Illinois Affiliate
11/2003-12/2005	Attending, Medicine Resident Clinics, Illinois Masonic Hospital
11/2003-12/2005	Attending, Resident Morning Report, Illinois Masonic Hospital
11/2003-12/2005	Faculty Coordinator, Morbidity & Mortality and Near Miss Conferences, Illinois Masonic Hospital
11/2003-12/2005	Lecturer Various topics (including Consultation Medicine, Medical Informatics, Diabetes, Acid-Base analysis, Fluid and Electrolyte Management, Pain Management, Career Planning), Noon Conferences for residents and students of both CMS and UIC at Illinois Masonic Hospital
9/2006-12/2020	Attending, Internal Medicine Inpatient Teaching Services, University of Michigan Hospital
12/2006-2013	Clinical Foundations of Medicine Course (M1 students), University of Michigan
12/2006-2013	Clinical Educator Program Sessions (M2 students), Univ. of Michigan
12/2006-2011	Feedback in Clinical Skills (M3 students), University of Michigan
9/2007-12/2020	Noon Conference Attending Presenter various topics (including Fluid/Electrolyte and IV Management, Acute and Chronic Pain Management, UM
8/2008	
	Acute Pain Management for the Hospitalist. Hospitalist Noon Conference, UM
9/2008	
	Conference, UM

2/2009	Acute Pain Management in the Hospital. Family Medicine Conf., UM
2/2009	Managing Chronic Pain in the Clinic. Medicine Resident Conference, UM
2/2009	Understanding the Ins and Outs of Buprenorphine. Hospitalist Noon Conference, UM
3/2009	Acute Pain Management on the Surgery Service. Surgery Resident Conference, UM
9/2009-12/2020	Resident Ambulatory Morning Report
3/2010	Opioid Management training session for UM PharmDs
2011-2020	Numerous student and resident rotators for Pain teaching from Medicine, Family Medicine, Spine Program, Psychiatry, Addiction
8/2011	David Cooke, MD faculty sabbatical 2-month training in pain and opioid management
8/2012	Third Year Student Clerkship Seminar: Principles of Pain Management, August
2012	Clinical faculty development workshops on managing controlled substance therapy at East Ann Arbor, Dexter and Brighton, Jun-Nov
10/2013	Anita Kirsch, MD faculty sabbatical 2-month training in pain and opioid management
3/2014	After hours buprenorphine training session for Drs. Soyster and McMaster from Canton.
9/2006-12/2020	UM Resident Morning Report, UM Medicine and Family Medicine Noon conference speaker on various topics; UM Pain fellow conferences
10/2015	Remedial UM Fam Med Faculty education and training
6/2023	Buprenorphine management in primary care. Michigan Opioid Collaborative seminars
10/2023-1/2024	IPRO ECHO series (online to 12 states) – organizer and presenter
9/2006-present	Attending, Taubman Medicine Resident Clinic, Univ. of Michigan

9/2006-present Medicine Resident Noon Conference lecturer

Committee, Organizational and Volunteer Service

Institutional	
1989-1991	Clinical Services Laboratory Committee, University of Chicago Hospitals
1991-1993	Medical Records Computerization Committee, UC Hospitals
1990-1995	Patient Care Evaluation Committee, UC/Weiss Hospital
1990-1995	Medical Staff Executive Committee, UC/Weiss Hospital
1990-1995	Chairman, Teaching and Evaluations Committee, UC/Weiss Hospital
1990-1996	Education Committee, UC/Weiss Hospital
1995-1996	Laboratory Information Systems Development Committee, UC/Weiss
1990-1996	Utilization Review Committee, UC/Weiss Hospital
1997-2003	Executive Committee, Chicago Medical School
1997-1998	Chairman, Chicago Medical School Residency Curriculum Committee
1997-2003	Information Systems Steering Committee, Sinai Health Systems
2003-2005	Education Committee, Department of Medicine, Mount Sinai Hospital
2003-2005	Coordination of Care Committee, Advocate Health Care System
2003-2005	Patient Safety Committee, Advocate Illinois Masonic Hospital
2003-2005	Performance Improvement Committee, Illinois Masonic Hospital
2003-2005	Physicians Informatics Advisory Committee, Illinois Masonic Hospital
2004-2005	Clinical Practice Council, Advocate Illinois Masonic Hospital
2003-2005	Chair, Performance Improvement Committee, Department of Medicine, Advocate Illinois Masonic Hospital
2003-2005	Illinois Masonic CareConnection CPOE Development Committee

2003-05	Adverse Drug Events Review Sub-Committee, Illinois Masonic Hospital
2006-08	Physician Executive, CareLink Orders Management Project (CPOE), Univ. of Michigan
2007-2009	Pain/Opioid Policy and Guideline Subcommittee, UM
2008-13	Medication Adverse Reactions Committee, UM
2008-2010	Clinical Documentation Committee, UM
2009-2014	Medication Safety Sub-Committee of Pharmacy and Therapeutics, UM
2007- present	Pain Team Board, University of Michigan Pain Service
2007- present	Pain Management Committee, University of Michigan
2009- present	Pain QI Committee, UM (Committee Co-chair: 2009-2014), UM
State and National	
10/1999-11/1999	Expert Panelist for Establishment of Standards for the Clinical Skills Assessment Examination, Educational Commission for Foreign Medical Graduates, Philadelphia, PA
1997-2001	Education Committee, Association of Program Directors in Internal Medicine
7/2009	FDA Opioid REMS Stakeholders Meeting, Washington, DC
11/2011-6/2016	Governor's Advisory Committee on Pain and Symptom Management, Lansing, MI
1/2015-present	Washtenaw Health Initiative Opioid Project
12/2021-present	Pain/Opioid LHS Learning Community. Multi-institutional national effort to reform and advance pain and opioid management
<u>Volunteer</u>	
1999-2006	Lakewood Balmoral National Historic District Landmarking Committee
2001-05	American Youth Soccer League volunteer (field and office)

2002-2004	Volunteer physician, Community Free Clinic, Chicago, IL
2004-2005	Volunteer physician, Helping Hands Clinic, Chicago, IL
2006-2019	Burns Park Players Community Theater, Ann Arbor, MI
2016-present	Voters Not Politicians – Michigan Proposition 2 in 2018 – Independent Redistricting Commission. Roles: volunteer signature gathering, public education presenter, canvasser, application workshop leader
2017-2018	Promote the Vote 2018 Proposition 2018 – volunteer canvasser

Visiting Professorships, Seminars and Extramural Invited Presentations

State and Local

8/1986	Case Discussant, Grand Rounds, Department of Medicine, University of Chicago
10/1993	Group Discussion Session Leader, American College of Physicians Illinois Associates Meeting, Chicago, IL
10/1997	"The Internet for Physicians and Other Health Care Workers" Department of Medicine Grand Rounds, Mount Sinai Hospital
1997-2003	Guest Lecturer: Management of Fluid and Electrolyte Imbalance; Assessment of Oxygenation; Management of Oxygen Therapy Malcolm X College/Cook County Physician Assistant Program
1998-2003	Lecturer, Chronic pain management and other topics in Internal Medicine, Family Practice Residency Conferences, Mount Sinai Hospital, Chicago, IL
7/1999	"Update on Anticoagulation in Rehab Patients" Grand Rounds, Schwab Rehabilitation Hospital, Chicago, IL
4/2002	"Use of handheld computing devices in Medicine" Chicago Medical School Retreat
10/2002	"Changing a Hospital's Practice of Pain Management" Grand Rounds, Mercy Hospital, Chicago, IL
7/2005	"Modern Medical Practice – Are You Ready to be a Techno-Geek?" Pediatric Grand Rounds, Illinois Masonic Hospital, Chicago, IL

3/2009	Managing Chronic Pain in the Clinic Setting. Bone Marrow Transplant Service Special Conference, UM
3/2009	"Managing Chronic Pain in the Clinic – Practicing Universal Precautions." Pain for the Non-Pain Specialist, Department of Anesthesiology Conference, UM
4/2009	Managing Chronic Pain in the Clinic – Practicing Universal Precautions. Rheumatology Faculty/Fellows Conference, UM
9/2009	Acute and Chronic Pain Management. UM Emergency Department Grand Rounds
2/2010	Managing Chronic Pain and Opioids. UM Physical Medicine and Rehabilitation Grand Rounds
10/2010	"Managing Chronic Pain and Controlled Substances in the Office" Southeastern Michigan Update in Family Medicine. Ann Arbor, MI
11/2010	"Chronic Pain and Opioid Management – The UM Guideline" Department of Obstetrics and Gynecology Grand Rounds, UM
12/2010	"Managing Pain and Opioid Therapy in the Office – A Time For Change" Department of Medicine Grand Rounds, UM
2/2011	"Managing Pain and Opioid Therapy in the Office" University Health Service Continuing Medical Education Lecture Series, Ann Arbor, MI
3/2011	"Pain Management and Opioids – A Time For Change" Common Problems in Office Practice, CME Conference, Plymouth, MI
9/2011	"Rational Use of Controlled Medications" Workshop, American College of Physicians Michigan Chapter Annual Scientific Meeting, Grand Rapids, MI
6/2012	"Peri-operative Analgesic Management - The Limited Role For Opioids" Orthopedic Grand Rounds, UM
6/2012	"Anticipating and Managing Pain in the Era of Prescription Drug Abuse - the Appropriate Use of Analgesics" Transplant Surgery Conference, UM
11/2012	"Managing Chronic Pain – the Limited Role For Opioids" Hurley Medical Center Workshop, Flint, MI
11/2012	"Managing Chronic Pain in the Era of Prescription Drug Abuse" St.

	Joseph Mercy Hospital Grand Rounds, Ypsilanti, MI
1/2013	"Chronic Pain: Evidence, Clinical Pearls and Practical Tools for Managing Your Patients." A full day conference for health care providers, Midland, MI [programmer, organizer, conference speaker]
1/2013	"Managing Chronic Pain – a Limited Role For Opioids" Providence Hospital Grand Rounds; case management workshop, Southfield, MI
2/2013	"Anticipating and Managing Pain in the Era of Prescription Drug Abuse – Appropriate Use of Analgesics" UM Trauma Burn Conference
3/2013	"Managing Pain and Controlled Medications" UM Geriatrics Workshop
4/2013	"Pain and Rational Analgesic Management in the Hospital Setting" Hurley, McLaren, Genesys Hospitals evening workshop, Flint, MI
9/2013	"Chronic Pain: Evidence, Clinical Pearls And Practical Tools for Managing Your Patients." A full day conference for health care providers, Lewiston, MI [programmer, organizer, chair and conference speaker]
10/2013	"Insidious Epidemic of Benzodiazepine Use and Abuse" A two part clinician workshop on anxiety and rational medication use. Michigan Academy of Family Physicians Fall Update, Ann Arbor, MI
10/2013	"Issues in Substance Abuse and Substance Abuse Disorder: What the Practicing Clinician Needs to Know (workshop) – Neurobiology of Addiction and Physiology of Chronic Pain; Rational Opioid and Sedative Prescribing; Case Discussions; Medical Marijuana – Review of Clinical Evidence. Troy, MI
11/2013	Visiting Professor, Grand Rounds, Case Conference "Managing Chronic Pain in the Era of Prescription Drug Abuse – What Have We Done?" St. Johns Hospital, Detroit, MI
4/2015	Ambulatory Pain and Controlled Medication Evaluation and Management Workshops. Saginaw VA
5/2015	"Managing Chronic Pain in the Era of Prescription Drug Abuse. Full Day workshop. Alma, MI

6/2015	"Chronic Pain Management Tools and Clinical Pearls" "Epidemiology of Benzodiazepine Use and Abuse" 51st Annual Update on Common Clinical Concerns in Primary Care, Shanty Creek, Bellaire, MI
11/2015	"Responsible Prescribing Practices in Pain Management" MidMichigan Health daylong continuing education symposium, Midland, MI
5/2016	"An Opioid Epidemic – Reversing the Trend While Improving Patients' Pain, Function and Lives. Lost Lake Woods Resort, Lincloln, MI
5/2016	PMR Pain Management Workshop: "Finding Balance When Managing Chronic Pain to Maximize Function and Minimize Harm" Spectrum Blodgett Hospital, Grand Rapids, MI
9/2016	"Finding Balance When Managing Chronic Pain to Maximize Function and Minimize Harm" Family Medical Ctr. of MI. Temperance, MI
10/2016	"Navigating Pain Management – Tools and Solutions For Physicians and Health Care Providers" full day workshop, Traverse City, MI
6/2017	Visiting Professor - Pain and Controlled Medication Management Workshop: Grand Rounds, hospital rounds, noon conference. St. John Hospital, Detroit, MI
5/2018	"Chronic Pain, the Opioid Epidemic, the CDC Guideline, New State Laws – Now What Do I Do? Alcona Health Center, Alpena, MI
5/2018	"Managing Pain in the Era of An Opioid Epidemic" All day workshop. McLaren Northern Michigan, Cheboygan, MI
6/2018	"Opioid Management Challenges" Detroit War Memorial/St. John Providence Ascension half day conference, Detroit, MI
9/2018	"Chronic Pain, the Opioid Epidemic, the CDC Guideline, New State Laws – Now What Do I Do? MidMichigan Gratiot Center half day conference. Alma, MI
10/2018	"Chronic Pain, the Opioid Epidemic, the CDC Guideline, New State Laws – Now What Do I Do? Plenary and breakout sessions at UM Fall Update in Family Medicine. Ann Arbor, MI
10/2018	"Continuing the Opioid Conversation: Tapering, Alternatives, Pharmacology and Overdoses" Thunder Bay Resort, Hillman, MI

1/2019	"The Insidious Epidemic of Benzodiazepine Use and Abuse" Providence Hospital Grand Rounds, Southfield, MI
1/2019	"Buprenorphine Prescribing in the Pain Patient" Webinar series
2/2019	"Pain and Opioid Management – Putting Words into Action" Authority Health evening workshop. Detroit, MI
6/2019	NW Michigan Health Dept. and Thunder Bay Pain Management Webinar
6/2019	UM Benzodiazepine Epidemic conference. UM, Ann Arbor
10/2019	"The Insidious Epidemic of Benzodiazepine Use and Abuse" Plenary and breakout sessions. UM Sports Medicine and Fall Update in Family Medicine. Ann Arbor, MI
8/2020- 7/2023	Buprenorphine Management in Patients with Pain – Spring and Fall Webinars for the Michigan Opioid Collaborative
<u>National</u>	
10/1997	"Intern Report: Teaching a Uniform Skills Set to PGY1's in Internal Medicine" (poster). Teaching Internal Medicine Conference, Chicago, IL
9/1998	"Resident Recruitment and Retention" Pre-course Workshop, Association of Program Directors in Internal Medicine (APDIM), Chicago, IL
3/2009	"Acute Pain and Opioid Management in the Hospital Setting" Medicine Grand Rounds, Methodist Hospital, Des Moines, IA
3/2009	"Managing Pain and Opioids in the Office – Practicing Universal Precautions" Special Guest Presentation, Iowa Health System, Des Moines, IA
5/2009	Controlled Substance Prescription Management in the Resident Continuity Clinics – Establishing Policies and Procedures Society of General Internal Medicine (SGIM) Pre-course, Miami, FL
7/2009	Internet Self-Study CME Activity: Managing Chronic Non-Terminal Pain Including Prescribing Controlled Substances. Co-author. Audience: primary care clinicians and other health care providers who treat adults with this condition. (Available through the UM CME web site: cme.med.umich.edu)

10/2010	Visiting Professor. "Chronic Pain and Controlled Substance Management." Grand Rounds and Case Conferences. Susquehanna Health System, Williamsport, PA
11/2011	Visiting Professor. "Acute Pain and Opioid Management in the Hospital Setting" Grand Rounds and Case Conferences. Susquehanna Health System, Williamsport, PA
3/2012	Visiting Professor. Iowa Required CME on Management of Pain and Opioids: in Both the Inpatient and Outpatient Settings. Grand Rounds and Case Conferences. Des Moines, IA
8/2012	"Managing Chronic Non-Terminal Pain: All Roads Don't Lead to Opioids" South Carolina Opioid Safety Initiative Conference, Charleston, SC
8/2012	Opioid Safety, State Policy and Strategies for Success. South Carolina Opioid Safety Initiative Conference, Charleston, SC
3/2014	Managing Chronic Pain in the Elderly - Maximizing Function, Minimizing Harm" Geriatric Grand Rounds, Rush Medical School, Chicago, IL
9/2014	Pharmacist Controlled Medication Management training. Medical University of So. Carolina – via Skype
3/2015	Visiting Professor: Inpatient and Ambulatory Pain and Analgesic Evaluation and Management Faculty, Resident and Student Workshops. Lankeanau Medical Center, Philadelphia PA
8/2016	Visiting Professor: Ambulatory Pain assessment and Management Grand Rounds; consultant to the Opioid Reduction Task Force; Meeting with Nursing regarding inpatient pain management and Epic. Rush University, Chicago, IL
10/2016	"The Opioid Crisis: The Primary Care Perspective. Midwest Pain Society, Chicago IL
4/2017	"Frontline Pain Management" Full day workshop plus full day with health system leadership. Regional Health, Rapid City, SD

4/2018 "ACP Pop-Up Education" Detection and assessment of opioid

overdose, and the use of naloxone. American College of Physicians

Annual Meeting New Orleans, LA.

8/2023 Visiting Professor: Hospitalist seminars – Inpatient pain

management. Nazareth Hospital, Philadelphia, PA

Bibliography

Peer-Reviewed Journals and Publications

- 1. Berland DW, Chu JS, Hosley MA, Jones LB, Kaliszewski JM, Lawler WC, Oakley B. New approaches to the problem of the trophic function of neurons. *Olfaction and Taste VI*, Paris, 1977.
- 2. Berland D. Internal medicine and pretraining for international medical graduates. <u>Letter</u>. *Annals of Internal Medicine* 1992; 118:397.
- 3. Bennett CL, Schwartz D, Lane D, Sipler A, Bhattacharya M, Kozloff M, Berland D, Pitrak D, Moswin A. Variations in inpatient care for HIV-related tuberculosis patients during a recent nosocomial outbreak of multidrug-resistant tuberculosis. <u>Letter</u>. *Journal of Acquired Immune Deficiency Syndromes* 1999; 21(4):348-49.
- 4. Berland D. Pain management in patients with advanced cancer. <u>Letter</u>. *Annals of Internal Medicine* 2000; 132:593.
- 5. Montanez A, Berland D. First steps in quality improvement: a pilot program for the management of acute sickle cell pain. *Journal of Clinical Outcomes Management* 2002; 9:19-26.
- 6. Parada FP, Deloria-Knoll M, Chmiel JS, Arozullah AM, et al. Relationship between health insurance and medical care for patients hospitalized with human immunodeficiency virus-related *pneumocystis carinii* pneumonia, 1995-1997: Medicaid, bronchoscopy and survival. *Clinical Infectious Diseases* 2003; 37:1549-1555.
- 7. Sureka, A, Parada JP, Deloria-Knoll M, Chmiel, JS, et. al. HIV-related pneumonia care in older patients hospitalized in the early HAART era. *AIDS Patient Care and STDs* 2004; 18:99-107.
- 8. Khraisat, A, Shanaah, A, Aljaghbeer E, Berland D, Cannady, P. Morning report emails: a unique model to improve the current format of an internal medicine training tradition. Letter. *Medical Teacher* 2007; 29(4):413.
- 9. Brummet C, Berland D, et al. Dexmedetomidine as a novel therapeutic for post-operative pain in a patient treated with buprenorphine. *Journal of Opioid Management* 2009; 5:175-179.

- 10. Berland DW, Rodgers PE, Green CR, Harrison RV, Roth RS. Managing Chronic Non-Terminal Pain Including Prescribing Controlled Substances. Ann Arbor, MI: Office of Clinical Affairs, University of Michigan Health System, 2009. Revised 2011. [Available from the Agency for Healthcare Research and Quality at www.guideline.gov] [practice guideline].
- 11. Berland D, Rodgers P. Rational use of opioids for management of chronic nonterminal pain. *Am Fam Physician* 2012; 86(3):252-258. [review article]
- 12. Rao K, Berland D, Young C, Walk ST, Newton DW. The nose knows not: poor predictive value of stool sample odor for detection of clostridium difficile. *Clin Infect Dis* 2013; 56(4):615-16. [letter]
- 13. Berland DW, Malinoff HL, Weiner MA, Przybylski, R. When opioids fail in chronic pain management: the role for buprenorphine and hospitalization. *Amer J Ther* 2013; 20:316-21.
- 14. Wasserman RA, Hassett AL, Malinoff HL, Berland DW, et. al. Pressure pain sensitivity in patients with suspected opioid-induced hyperalgesia. *Reg Anesth Pain Med* 2015; 40:687-93.
- 15. Wasserman RA, Hasset AL, Goesling J, Malinoff, HL, Berland, DW, et. al. Pressure sensitivity and phenotypic changes in patients with suspected opioid-induced hyperalgesia being withdrawn from full mu agonists. *J Nat Sci* 2017; 3(2): e319.
- 16. Rihn JA, Radcliff K, Norvell DC, Eastlack R, Phillips FM, Berland D, Sherry N, Freedman M, Vaccaro AR. Comparative effectiveness of treatments for chronic low back pain, a multiple treatment comparison analysis. *Clin Spine Surg* 2017; 30:204-225.
- 17. Fenske JN, Berland DW, Chandran S, Harrison RV, Hilliard PE, Schneiderhan J. Pain Management [Internet]. Ann Arbor (MI): Michigan Medicine University of Michigan; 2021 January. Available from https://www.ncbi.nlm.nih.gov/books/NBK572296/. PubMed PMID: 34310088 and from UMHS at http://www.uofmhealth.org/provider/clinical-careguidelines]
- 18. Madison NI, Cooke DA, Berland DW, Marshall VD, Smith MA. Efficacy and safety of low dose naltrexone for chronic Pain, *Jl of Pain & Palliative Care Pharmacotherapy* 2024; 38(1):13-19.

Book Chapter

1. Berland D, Haider N. Anticipating and Managing Perioperative Pain. Perioperative Medicine: Medical Consultation and Co-Management. 1st Ed. Jaffer A, Grant, P. Wiley-Blackwell. August, 2012.

Abstract

1. Berland D, Malinoff H, Weiner M. Medical Management of Patients Withdrawn from High Dose Opioid Therapy for Chronic Pain. Presented at: American Society of Addiction Medicine 43rd Annual Medical-Scientific Conference, Atlanta, GA, April, 2012.

<u>Audio</u>

1. Berland, D. Benzodiazepine use and abuse in anxiety disorders. Audio-Digest Family Practice 2015; vol. 63, issue 39 ISSN0271-1362.

EXHIBIT B

Report of Dr. Berland in the Case of the US v. Peter Nwoke

Reviewer and Retention:

My name is Dr. Daniel Berland. I was retained by the United States to provide opinions and analysis concerning the controlled medication prescribing and Medicare billing practices by Dr. Nwoke.

I am a physician, Board Certified in Internal Medicine as well as Addiction Medicine. I received my MD degree from Ohio State University, completed an Internal Medicine residency at Henry Ford Hospital, am Emeritus Clinical Associate Professor of Medicine at the University of Michigan, and actively practice in the University in the Department of Medicine. A detailed listing of my qualifications can be found in my CV.

Standard Applied During my Review and Analysis

Prescriber practices related to the medical care of patients and the prescription of controlled medications must meet Medicare and Federation of State Medical Society standards, Michigan state law, and common practice guidelines found in the medical literature. Medicare and Medicaid have specific policies that must be followed related to the conduct of patient visits, required documentation of those visits, coverage of or supervision of one prescriber by another, and billing.

<u>Professional Medical Practice and Standards of Care Related to issuing prescriptions for various treatments</u>

Safe and proper practice related to the prescription of controlled medications necessitates the following:

- A suitable amount of time must be spent with the patient to obtain an appropriate history and
 perform an appropriate physical examination that utilizes specific exam techniques directed toward
 the specific locations of reported symptoms. Such an examination may verify or refute claimed
 symptoms, illness, or disability, help discern a diagnosis, and suggest diagnostic testing or a specific
 treatment.
- A check of the Prescription Drug Monitoring Program (MAPS in Michigan), recommended prior to and required by law as of June 1, 2018, should be performed to detect evidence of doctor-shopping or gaps in treatment that could be a sign that medications were not actually being taken.
- Toxicology screening should be performed to detect if prescribed medications, or those claimed by
 the patient to be taken, are present, as well as to detect whether other non-prescribed controlled
 medications or any illicit substances are present, acting on those results, then prescribing
 appropriately based upon those results.
- Patients should be counseled about the risks of opioid therapy and a prescriber/patient agreement regarding requirements for continued prescribing (aka, a controlled substance agreement) should be completed.

Materials Reviewed:

Nearly 500 MB of materials were provided to me for review, including the indictment, summary reports by an investigating agent, MAPS data for 25 patients, MAPS data for Dr. Nwoke, records of cash

payments and deposits, items seized during the search warrant carried out, selected patient visit documents, and trial transcripts.

Opinion Reached:

Dr. Nwoke engaged in a practice of prescribing controlled medications that were valuable and sought after for drug abuse. Pill dealers and addicted patients desire to obtain these drugs in exchange for cash. Dr. Nwoke's prescribing practices, especially when combined with his exclusion from insurance billing and his cash deposits, are consistent with issuing medically unnecessary prescriptions in exchange for cash. As I will describe, this opinion has been arrived at based upon the patterns of medication choices and tablet strengths that were prescribed, particularly maximum strength opioid tablets, that were and continue to be highly sought for diversion and sale on the street market. The pattern of these prescriptions was far outside the normal distribution of prescriptions that would be expected to be based on actual legitimate patient visits and their medical need. Sample visit notes that I reviewed demonstrated a lack of compliance with any above-mentioned prescribing safety checks, or documentation standards. There appeared to be no actual medical care that occurred.

Basis for Opinion:

- MAPS data showed that during the period in question, Dr. Nwoke prescribed enormous numbers of opioid tablets: 856,000 tablets of various forms of oxycodone and oxymorphone. For example, he prescribed 808,000 of the highest strength and most highly sought oxycodone IR 30 mg tablets out of a total of 809,000 oxycodone tablets of various strengths. It is worth noting that oxycodone IR comes in many different tablet strengths down to 5 mg tablets and that most prescribers prescribe it as 5 mg or 10 mg tablets. In another example, out of 30,000 OxyContin (extended-release oxycodone) branded tablets that he prescribed, 22,000 were the highest strength 80 mg tablets that at that time could be crushed and snorted to produce a high. As another example, he prescribed 300 Opana brand (extended release oxymorphone) 20 mg tablets compared with 16,000 of the 40 mg tablets, the highest strength tablet available, one that was not tamper-proof, and has since been removed from the market because of known abuse of it. Certainly, Dr. Nwoke's prescribing did not represent the normal distribution of tablet strengths that would be expected in typical practice.
- In January 2011, he issued 140 opioid prescriptions in just one week. When totaling the prescriptions over the three-year period of 2011-2013, that was a rate of at least 6 prescriptions per day 365 days per year, an extraordinary rate.
- He prescribed other highly sought medications including the benzodiazepine alprazolam, but only in 1 or 2 mg tablet strengths, 2 mg tablets the being the most highly sought on the street. In a typical practice, patients should be prescribed only short courses of this medication for perhaps 1 to 2 weeks, and most prescriptions are issued as 0.25 or 0.5 mg tablets. He prescribed other highly sought drugs such as carisoprodol (Soma), a sedative, along with large quantities of highly sought promethazine/codeine cough syrup that could go for up to \$500 a bottle on the street. Summaries of MAPS data for individual patients showed prescriptions month after month for as long as a year, a rather long duration for a cough. Examples included 32 prescriptions during a two-year period for Jessie L. Ballard, and 10 monthly prescriptions for Edward Alexander during 2010 and 2011.
- MAPS data demonstrated that prescriptions for individual patients were at times issued at variable
 intervals and would imply that patients were not actually taking those medications since had they,
 gaps in the timing of prescriptions could have caused suffering because of acute opioid withdrawal.
 Further, a resumption of high dose opioid after a gap in use could result in opioid overdose. MAPS
 records for individual patients at times showed abrupt changes from one opioid to another of a

- different potency, or from one tablet strength to another. Those changes did not represent typical dose adjustments and could have put the patients at risk for opioid withdrawal or overdose, depending upon the change.
- In early 2010, Dr. Nwoke abruptly switched patients who were prescribed OxyContin to oxycodone IR 30 mg tablets or extended release oxymorphone 40 mg tablets, though not at equivalent morphine equivalent dosing, the standard by which total opioid dose is judged. Abrupt changes in that dose could cause considerable patient discomfort, harm, or even death. The change in Dr. Nwoke's prescribing coincided with the timing of the reformulation of OxyContin to a tamper-resistant tablet that immediately eliminated its value as a street drug since it could no longer be crushed and snorted. The highest strength oxycodone IR tablets, easily tampered with for illicit use, became king of the street drug market. That is certainly reflected in the vast numbers of oxycodone IR 30 mg tablets prescribed by Dr. Nwoke. It is worth noting that in his defense testimony, the doctor claimed as his reasoning for the change of his prescribing that his patients developed "allergies," had "trouble swallowing" the OxyContin tablets, or other problems such as one patient who had a small bowel obstruction, ridiculous claims that have no basis in the medical literature.
- According to MAPS data for which there was payment data, 18,242 of Dr. Nwoke's prescriptions
 were paid for by cash out of 26,567 prescriptions issued. That is an extraordinary number that
 would probably be expected to be in the single-digit percent range in a typical practice. This is
 reflective of prescribing for pill sellers, who can pay cash to the doctor for a prescription, cash at the
 pharmacy, and still make a profit with illegal street sales.
- MAPS data showed that 3,183 Dr. Nwoke prescriptions were filled at a pharmacy using Medicare or Medicaid. Legitimate patients who were insured by Medicare or Medicaid would typically see a doctor who accepted that insurance, instead of paying cash to a doctor who could not bill those insurance programs. It would be government insurance fraud for Dr. Nwoke to treat a patient and then bill under the number of another doctor who did not provide the medical services, while Dr. Nwoke was barred from billing through the Medicare program.

Comments:

Based upon all the above information, I conclude that Dr. Nwoke engaged in an illicit practice in which he issued prescriptions pills of high value on the street drug market, likely in exchange for cash payments.

Certification:

1. I have testified as an expert in the following matters in the past five years: US vs David Jankowski, US vs Muhammad Awaisi, US vs Lawrence Sherman

2. Qualifications and publications are listed in my CV.

I have signed and approved this disclosure.

Daniel Berland, MD, FACP

Clinical Associate Professor of Medicine

May 8, 2024

Date

I reserve the right to amend this report should further information become available. Further, I reserve the right to respond to any expert reports from the defendant.

EXHIBIT C

Qualifications and Experience

Peter A. Hayes, Supervisory Special Agent Federal Bureau of Investigation, Detroit Division

Supervisory Special Agent (SSA) Peter Hayes has been a Special Agent with the Federal Bureau of Investigation (FBI), duly appointed according to law and acting as such, since May 2010. SSA Hayes is a Certified Public Accountant (CPA), a member of the Association of Certified Fraud Examiners (ACFE), and a member of the National Association of Drug Diversion Investigators (NADDI). In the last 10 years, SSA Hayes has authored no papers. In the last four years, he has testified in the following cases:

- U.S. vs Peter Nwoke, Eastern District of Michigan, 18cr20686, Judge Hood
- U.S. vs Hasna Iwas, Eastern District of Michigan, 18cr20769, Judge Michelson

The prior testimony of Peter Hayes in U.S. vs Peter Nwoke is adopted and incorporated by reference in this Rule 16 disclosure.

SSA Hayes graduated from the FBI Academy in Quantico, VA in October 2010 and was immediately assigned to work Health Care Fraud (HCF) matters for the Detroit Division of the FBI. More specifically, SSA Hayes was assigned to work investigations focused specifically on Prescription Drug Diversion matters, beginning in October 2010. In this capacity, SSA Hayes attended several trainings, including the FBI's national HCF Basic training, which is designed to train Special Agents newly assigned to working HCF matters, as well as other trainings specific to HCF, money laundering, interviewing, and trainings specific to Prescription Drug Diversion, put on by NADDI. SSA Hayes also attended advanced trainings specific to Human Intelligence (HUMINT), focusing on the recruitment, development, and operations of Confidential Human Sources (CHSs).

In his capacity as a Special Agent assigned to the FBI Detroit HCF squad, SSA Hayes has been personally involved in investigations concerning prescription drug diversion and health care fraud, as well as methods used to finance and conceal the profits of such operations. Through his continued trainings and investigative experience, SSA Hayes is also familiar with the Medicare program and the federal health care fraud and narcotics trafficking laws. While investigating Prescription Drug Diversion, in an effort to further his training and gain an increased understanding of current and evolving trends in the diversion of prescription drugs and health care fraud, SSA Hayes routinely interacted and collaborated with other law enforcement officers from federal, state and local partners, other FBI Divisions, and investigators from private companies such as the investigative services branches of insurance companies and the National Insurance Crime Bureau. SSA Hayes has interviewed numerous self-proclaimed drug users, drug addicts, prescription drug dealers, patient recruiters/caregivers, pharmacists, medical doctors, and owners and employees of medical clinics, all of which have contributed to his further understanding of, and background in, investigations pertaining to HCF and Prescription Drug Diversion.

In approximately March 2017, SSA Hayes was transferred from FBI-Detroit's HCF squad to the Human Intelligence (HUMINT) squad. In this capacity, SSA Hayes had the primary responsibilities of recruiting, developing, and operating Confidential Human Sources (CHSs), who could report specifically on HCF matters, and in particular, Prescription Drug Diversion. Additionally, while on the HUMINT Squad, an additional responsibility of SSA Hayes's was to train new Special Agents on the recruitment, development, and operational aspects of CHSs. SSA Hayes specifically met and worked with every new agent assigned to the FBI Detroit Division's HCF squad to assist in their training and development. On

several occasions, SSA Hayes has provided training blocks, specific to the recruitment, development, and operation of HCF CHSs at the FBI's national HCF trainings. SSA Hayes has experience operating numerous CHSs in a variety of fields pertaining to Health Care Fraud and Prescription Drug Diversion, such as doctors, pharmacists, medical practice owners, physical therapists, medical assistants, medical patients, patient recruiters, drug dealers and recovering drug addicts.

In approximately May 2022, SSA Hayes was named as an Acting Supervisory Special Agent, and his promotion to SSA became official in November 2022. In his current capacity, SSA Hayes oversees and manages a squad of Special Agents, and a multi-agency Task Force which investigates matters including, but not limited to, Public Corruption, Civil Rights Violations, and Fraud Against the Government.

This document is intended to outline a brief summary of certain investigative knowledge and opinions specific to Health Care Fraud and Prescription Drug Diversion, which SSA Hayes has learned throughout his nearly 12 years investigating such matters.

PRESCRIPTION DRUG DIVERSION

Prescription drug diversion, or controlled substance diversion, can best be defined as obtaining pharmaceutical drugs intended for a legitimate medical purpose and diverting them to an illegitimate purpose such as street sales and abuse. Based on experience and specialized training as a Special Agent, and experience in investigating drug diversion investigations, SSA Hayes is aware of prescribing patterns which are commonly seen by medical providers, such as physicians, who are prescribing controlled substances outside the course of legitimate medical practice and pharmacies dispensing these substances outside legitimate pharmacy practice. These patterns include, but are not limited to:

- multiple patients receiving the same combination of controlled substances;
- the use of multiple pharmacies by patients to fill prescriptions;
- individuals traveling outside of the area in which they live to obtain prescriptions;
- excessive numbers of identical prescriptions in different names prescribed by the same doctor and filled by the same pharmacy;
- patients obtaining excessive quantities of controlled substances over an extended period of time;
- patients obtaining similar prescriptions from multiple different doctors;
- patients receiving multiple prescriptions simultaneously for different opiate-based narcotics, or other substances with a known street desire;
- patients receiving prescriptions for the maximum dosage of a narcotic, or other controlled substance, with no titration ("ramp up") or trial period;
- doctors and/or pharmacists charging exorbitant fees to write prescriptions, or to fill such prescriptions, rather than, or in addition to, billing a patient's insurance;
- · patients of limited means paying for expensive narcotics with cash;
- doctors routinely prescribing the highest available dosage of a controlled substance;
- patients involved in drug distribution conspiracies obtaining medications from a specific doctor;

- doctors routinely prescribing, and pharmacies routinely filling, numerous non-controlled medications, often referred to as "maintenance medications" along with commonlydiverted controlled substances; and
- doctors changing their prescribing habits in line with the current street desire, or highest street value, of certain controlled substances.

Title 21 United States Code (U.S.C.) section 822(a)(1) requires that every person who manufactures or distributes a controlled substance must be registered by the Attorney General of the United States. Such registrations are maintained by the U.S. Drug Enforcement Administration (DEA), and the registrant's activity with controlled substances is limited to the extent of his/her registration. Title 21 U.S.C. 802(21) defines a "practitioner" as a physician, dentist, veterinarian, scientific investigator, pharmacy, hospital, or other person, licensed, registered or otherwise permitted by the United States or the jurisdiction in which he practices or does research, to distribute, dispense, conduct research with respect to, administer, or use in teaching or chemical analysis, a controlled substance in the course of professional practice or research.

Title 21 of the U.S.C. 822(a)(2) requires that every person who proposes to dispense any controlled substance, shall obtain from the Attorney General a registration issued in accordance with the rules and regulations promulgated by him. Title 21 U.S.C. 802(10) defines the term "dispense" as to deliver a controlled substance to an ultimate user or research subject by, or pursuant to the lawful order of, a practitioner, including the prescribing and administering of controlled substance for such delivery. Title 21 U.S.C. 802(27) defines "ultimate user" as a person who has lawfully obtained, and who possesses, a controlled substance for his own use or for the use of a member of his household.

Title 21 of the Code of Federal Regulation (C.F.R.), Sec. 1306.04(a) states that in order for a prescription for a controlled substance to be effective it must be issued for a legitimate medical purpose by an individual practitioner acting in the usual course of his professional practice. The responsibility for the proper prescribing and dispensing of controlled substances is upon the prescribing practitioner, but a corresponding responsibility rests with the pharmacist who fills the prescription. An order purporting to be a prescription issued not in the usual course of professional treatment or in legitimate and authorized research is not a prescription within the meaning and intent or section 309 of the Controlled Substances Act (21 U.S.C. 829) and the person knowingly filling such a purported prescription, as well as the person issuing it, shall be subject to the penalties provided for violations of the provisions of law relating to controlled substances.

The Controlled Substances Act (CSA) was enacted into U.S. law by Congress in 1970, as part of Title 21 of the United States Code. Drugs which are considered controlled substances under the CSA are grouped into one of five "Schedules" (Schedule I – Schedule V). Substances assigned to Schedule I have no currently accepted medical usage in the United States, and therefore may not be prescribed by a doctor or filled by a pharmacist.

The U.S. Drug Enforcement Administration (DEA) has determined certain prescription medications are "controlled" based on their potential for addiction and abuse. The DEA assigns a "Schedule" to these prescription medications according to their potential for abuse and addiction, with a controlled substance in Schedule II having the highest potential for addiction and abuse, among all

substances available for prescription. Prescription drugs which are "controlled" are assigned to Schedule II, III, IV, or V.

COMMONLY DIVERTED CONTROLLED SUBSTANCES

Through SSA Hayes's training and investigative experience of drug diversion conspiracies, he has been aware of numerous individuals and organizations of individuals in the greater Detroit, Michigan area diverting controlled substances, such as OxyContin®, Oxycodone HCl, Oxymorphone, and various other controlled substances for illegal sale within the state of Michigan and/or out of the state of Michigan. These organizations often include, but are not limited to: doctors or medical office workers who write the prescriptions; pharmacists and pharmacy owners and/or workers who fill these prescriptions without appropriate scrutiny; patient recruiters, who bring patients to doctors; runners who bring the prescriptions to pharmacies; drug dealers or transporters who sell the pills and/or transport them to the street market; and, in some cases, an individual who controls the organization. An individual can act in any one or more of the above-mentioned capacities within these drug diversion conspiracies and organizations.

Oxymorphone Hydrochloride (commonly known by the brand name of OPANA® or simply as oxymorphone) is an opioid-based narcotic, and a Schedule II Controlled Substance as defined in Title 21 of the United States Code. OPANA® ER is an extended-release tablet of OPANA® intended for the relief of moderate to severe pain in patients requiring continuous around-the-clock opioid treatment for an extended period of time. OPANA® ER is commonly referred to simply as OPANA®. Through training and experience, SSA Hayes has learned that OPANA® ER is a morphine-like opioid-based chemical substance, which has an abuse liability similar to that of other opioid agonists or analgesics. Based on SSA Hayes's training and experience, SSA Hayes is aware that "oranges" is a street reference to oxymorphone 40mg prescription pills, which are orange in color.

Oxycodone Hydrochloride (commonly known by the brand names of OxyContin® and ROXICODONE®) is an opioid-based narcotic, and a Schedule II Controlled Substance as defined in Title 21 of the United States Code. Oxycodone Hydrocloride (HCI) is generally referred to simply as "Oxycodone" or "Oxy." Oxycodone is also the narcotic ingredient in Percocet®, Percodan®, and Tylox®. The effects of Oxycodone, when abused or misused, are similar to that of heroin, and can result in overdose and/or death. Based on SSA Hayes's training and experience, he is aware that "blues" is a street reference to oxycodone 30mg prescription pills, which are blue in color, and that "Perc's" is a commonly used street reference for Percocet®.

Hydrocodone Bitartrate is an opioid-based narcotic and/or antitussive available in combination with other ingredients, and different combination products are prescribed for different uses. Hydrocodone Bitartrate is commonly known for being combined with Acetaminophen to form a narcotic pain reliever tablet (commonly known by the brand names, Vicodin®, Lortab®, Lorcet®, and Norco®). This Hydrocodone Bitartrate/Acetaminophen combination is a Schedule II Controlled Substance as defined in Title 21 of the United States Code, and is used to relieve moderate to severe pain. (It should be noted that prior to October 6, 2014, this Hydrocodone Bitartrate/Acetaminophen combination was classified as a Schedule III Controlled Substance as defined in Title 21 of the United States Code).

Alprazolam (commonly known by the brand name XANAX®) is a benzodiazepine and a Schedule IV Controlled Substance as defined in Title 21 of the United States Code. Alprazolam works by slowing down the movement of chemicals in the brain that may become unbalanced. This results in a reduction in nervous tension (or anxiety). Alprazolam is primarily intended to treat anxiety and/or panic disorders. Alprazolam is often used recreationally, or through addiction, due to its ability to cause the user feelings of relaxation, calm, or overall wellbeing. Other benzodiazepine controlled substances, similar to Alprazolam, which are also diverted, though not as often as Alprazolam, include, but are not limited to Diazepam (commonly known by the Brand name Valium®), Diazepam (commonly known by the Brand name Klonopin®), and Lorazepam (commonly known by the Brand name Ativan®), Alprazolam is available in four different dosage units, ranging from the smallest of 0.25mg, to the largest of 2mg. Based on SSA Hayes's training and experience, he is aware that the most commonly diverted dosage units are the 1mg and 2mg versions which are often referred to as "footballs" and "bars," respectively, due to their physical shapes.

Carisoprodol (commonly known by the brand name Soma®) is a muscle relaxant and is commonly prescribed to help the muscles relax and relieve pain due to muscle spasms. Prior to January 2012, Carisoprodol was not a scheduled medication; however, due to a notable increase in abuse of Carisoprodol, it became a Schedule IV Controlled Substance, as defined in Title 21 of the United States Code, in January 2012. Carisoprodol is prescribed in 250 and 350 mg tablets. According to the National Institutes of Health, a part of the U.S. Department of Health & Human Services, the maximum recommended duration of usage of Carisoprodol is up to two to three weeks. Carisoprodol has been found to accelerate the effects of other drugs and therefore drug abusers commonly mix this with Benzodiapines and/or opiate-based pain relivers such as oxycodone, oxymorphone or hydrocodone.

Promethazine with codeine syrup is a narcotic cough suppressant and antihistamine combination and a Schedule V Controlled Substance as defined in Title 21 of the United States Code. Promethazine/codeine syrup is generally used for treating cough and other respiratory symptoms. The antihistamine works by blocking the action of histamine to reduce the symptoms of an allergic reaction, such as a runny nose and sinus drainage. The cough suppressant works in the brain to decrease the cough reflex. Promethazine/codeine syrup, which is often referred to on the street as "codeine cough syrup" or simply "cough syrup" or "syrup," is often mixed with various flavors of soda or juice as a recreational drug, and is often used to dip marijuana cigarettes into to create a euphoric "high." Promethazine/codeine syrup is most commonly prescribed in liquid form by the milliliter. When taken in large quantities, both promethazine and codeine can lead to sedation and altered levels of consciousness. Known side effects of codeine include mental and respiratory depression, and known side effects of promethazine include drowsiness, fatigue and decreased motor coordination.

NOTABLE TRENDS IN COMMONLY DIVERTED CONTROLLED SUBSTANCES

Through SSA Hayes's training and investigative experience of drug diversion conspiracies, SSA Hayes learned of a trend in the street desire of some of the above-mentioned narcotics. Prior to August 2010, OxyContin® was among the most sought after and highest value of prescription pain killers. In August 2010, Purdue Pharma, L.P., the manufacturer of OxyContin® reformulated the OxyContin® tablet and

discontinued the manufacturing and distribution of the original formulation of OxyContin®. The new formula contained the same amount of active ingredient if the medication was taken orally. However, if an attempt was made to crush, snort or inject the new formulation, the pill would turn into a gel-like substance, making these common forms of abuse nearly impossible. This made the recreational use of OxyContin® considerably less desirable, thereby decreasing the demand for its diversion. This created an almost immediate spike in the demand for both ROXICODONE® and OPANA®, which could still be crushed, snorted, and injected and were both among the most highly sought after prescription pain killers from August 2010, through January 2012.

Similarly, SSA Hayes learned of a subsequent trend in the street demand for some of the above-mentioned narcotics. Between August 2010, and January 2012, OPANA® ER was among the most sought after and highest value prescription pain killers. In or around January 2012, Endo Pharmaceuticals Holdings Inc (Endo), the manufacturer of OPANA® ER, discontinued the manufacturing and distribution of the original formulation of OPANA® ER, in order to reformulate the OPANA® ER tablet into an abuse resistant form, similar to OxyContin. This created an almost immediate spike in the demand for ROXICODONE® (and generic equivalents). Endo released a reformulated version of OPANA® ER in March 2012. The new formula made the recreational use of OPANA® ER considerably less desirable, thereby decreasing the demand for its diversion. This resulted in a continued increase in the demand for ROXICODONE® (and generic equivalents), which has been among the most highly sought after prescription pain killers since August 2010.

COSTS ASSOCIATED WITH OBTAINING COMMONLY DIVERTED PRESCRIPTION SUBSTANCES

Through SSA Hayes's training and investigative experience of drug diversion conspiracies, SSA Hayes has been aware of several of the costs associated with obtaining and filling prescriptions for the most-commonly diverted controlled substances. The primary costs associated with obtaining and filling such prescriptions have historically included:

- Cash or insurance payments paid to the doctor, or other medical practitioner, who writes the prescriptions;
- Cash or insurance payments paid to the pharmacist, or pharmacy worker or owner, who fills the prescription;
- Cash payments paid by patient recruiters to the patients they have recruited to see the doctor and fill the prescriptions in their names;
- Cash payments paid to individuals who may have referred the patients to the patient recruiters; and
- Cash prices paid by end users of the prescription drugs to the individuals who have acquired the diverted drugs.

The cash prices paid to doctors, or medical practitioners, as well as the cash prices paid to pharmacists, or pharmacy workers/owners, often vary based on the actual prescriptions written and filled. Prescription drugs which carried the highest street values, such as Schedule II narcotics, have historically been the most expensive prescription drugs to acquire through diverted means. Through SSA

Hayes's training, investigative experience, numerous debriefings with CHSs, as well as his collaboration with other law enforcement officers from federal, state and local partners, other FBI Divisions, and investigators from private companies such as the investigative services branches of insurance companies and the National Insurance Crime Bureau, SSA Hayes is aware that during the approximate time frame of 2010 – 2013, patients, or patient recruiters, often incurred costs such as the following to acquire diverted prescription medications:

- Up to, and occasionally exceeding, \$500 paid to doctors, or other medical practitioners, to write prescriptions for Schedule II narcotics;
- Up to, and occasionally exceeding, \$500 paid to pharmacists, or pharmacy workers/owners, to fill such prescriptions, including Schedule II narcotics;
- Approximately \$100-\$200 paid by patient recruiters, to the actual patients, in order to
 compensate the patients for visiting a medical practitioner to acquire the prescriptions,
 subsequently visiting a pharmacy to have the prescriptions filled in their name, and
 ultimately turning the diverted prescriptions over to the patient recruiter, or dealer; and
- Approximately \$50-\$100 paid by patient recruiters, as a referral fee, to individuals who may have referred a patient to the patient recruiter.

In reviewing the controlled substance prescriptions written by Dr. Peter Nwoke, I noted that the vast majority of prescriptions written for oxycodone or oxymorphone were for the highest available dosage, and for a minimum of 60 tablets. As noted above, these are two key indicators of a doctor which may be involved in a prescription drug diversion scheme.

Based on my previous training and experience, it is my opinion that patient recruiters would likely be willing to pay approximately \$500 for a patient "visit" that resulted in a prescription for at least 60 tablets of either oxycodone or oxymorphone. While cash prices paid for patient "visits" resulting in desirable prescriptions can vary, patient recruiters are known to haggle, or bargain, with the doctors that write these prescriptions, in an effort to get the doctors to increase the dosage unit and the number of tablets prescribed, and/or to add on additional prescriptions for other substances which also have a street desire, albeit at lower street prices. Accordingly, it is also my opinion that less valuable prescriptions, such as, but not limited to, Hydrocodone Bitartrate, Alprazolam (or a similar benzodiazepine), Carisoprodol, or Promethazine with Codeine, prescribed at the same time would at times be provided without additional charge, or at times may result in an incremental charge.

A patient "visit" which resulted in the prescribing of the less valuable drugs noted above, without any of the more valuable drugs, such as oxycodone or oxymorphone, might result in a patient recruiter being willing to pay a typical amount of approximately \$100 or more. The price which a patient recruiter would be willing to pay would be dependent upon if the patient recruiter could turn a profit off of the prescribed medications.

Based on my previous experience, it is my opinion that a reasonable estimate of the cash paid to Dr. Nwoke for diverting controlled drugs to the street market can be reached by multiplying each of the patient visits resulting in a prescription for at least 60 tablets of oxycodone or oxymorphone by \$500, and each patient visit resulting in prescriptions for the less valuable medications noted above, without a prescription for either oxycodone or oxymorphone, by \$100.

STREET PRICES ASSOCIATED WITH COMMONLY DIVERTED PRESCRIPTION SUBSTANCES

Through SSA Hayes's training and investigative experience of drug diversion conspiracies, SSA Hayes is aware of various street prices of several of the most commonly diverted controlled substances. While prescription substances have varying street prices depending upon geographical location, as mentioned above, SSA Hayes is aware of, and has investigated, numerous organizations of individuals in the greater Detroit, Michigan area diverting controlled substances, for illegal sale within the state of Michigan and/or out of the state of Michigan to locations where the street prices for these controlled substances are often higher. Through SSA Hayes's training, investigative experience, numerous debriefings with CHSs, as well as his collaboration with other law enforcement officers from federal, state and local partners, other FBI Divisions, and investigators from private companies such as the investigative services branches of insurance companies and the National Insurance Crime Bureau, SSA Hayes is aware that during the time frame 2010 – 2013, the approximate "Street Market" price for some of these drugs were as follows:

- A. Oxycodone Prices of approximately \$0.50 to \$1.00 per milligram, or more, for oxycodone tablets such as OxyContin®, ROXICODONE® or generic equivalents.
- B. OPANA® Prices of approximately \$1.00 to \$1.50 per milligram, or more, for OPANA® tablets or generic equivalents.
- C. PERCOCET® Prices of approximately \$5.00 \$10.00 per tablet, for PERCOCET® tablets or generic equivalents.
- D. Hydrocodone Bitartrate/Acetaminophen Prices of \$2.00-\$6.00 per tablet, for Hydrocodone Bitartrate/ Acetaminophen tablets (commonly known by brand names such as Vicodin® or Norco®)
- E. Alprazolam Prices of \$2.00 per milligram, or more, for Alprazolam tablets (commonly known by the brand name XANAX®).
- F. Promethazine/codeine syrup Prices of up to \$50.00 per liquid ounce (or 30 milliliters), for Promethazine/codeine syrup.

Peter A. Hayes

Supervisory Special Agent

Federal Bureau of Investigation, Detroit Division

Date

7/16/2024

EXHIBIT D

	Prescription	-	Expected Price	Total
Drug Name and Strength	Quantity	Scripts	per Script	Potential Cash
ACETAMINOPHEN-CODEINE PHOSPHATE 120 MG/5 ML-12 MG/5 ML	360	Н		
ACETAMINOPHEN-CODEINE PHOSPHATE 300 MG-30 MG	09	24		
ACETAMINOPHEN-CODEINE PHOSPHATE 300 MG-60 MG	20	က		
ACETAMINOPHEN-CODEINE PHOSPHATE 300 MG-60 MG	30	9		
ACETAMINOPHEN-CODEINE PHOSPHATE 300 MG-60 MG	40	9		
ACETAMINOPHEN-CODEINE PHOSPHATE 300 MG-60 MG	09	14		
ACETAMINOPHEN-CODEINE PHOSPHATE 300 MG-60 MG	06	4		
ACETAMINOPHEN-CODEINE PHOSPHATE 300 MG-60 MG	150	П		
ALPRAZOLAM 0.5 MG	30	2		
ALPRAZOLAM 1 MG	. 30	578		
ALPRAZOLAM 1 MG	45	ᆏ		
ALPRAZOLAM 1 MG	09	145		
ALPRAZOLAM 1 MG	06	6		
ALPRAZOLAM 2 MG	15	14		
ALPRAZOLAM 2 MG	30	72		
ALPRAZOLAM 2 MG	09	13		
ALPRAZOLAM 2 MG	06	3		
ALPRAZOLAM 2 MG	120	1		
AMPHETAMINE SALT COMBO 5 MG	30	Н		
ASCOMP W/CODEINE 325 MG-50 MG-40 MG-30 MG	09	\leftarrow		
BUPRENORPHINE-NALOXONE 8 MG-2 MG	09	Н		
BUTALBITAL-ACETAMINOPHEN-CAFFEINE 325 MG-50 MG-40 MG	06	4		
BUTALBITAL-APAP-CAFFEINE-CODEINE 325 MG-50 MG-40 MG-30 MG	09	П		
CARISOPRODOL 350 MG	30	2		
CARISOPRODOL 350 MG	40	Н		
CARISOPRODOL 350 MG	09	61		
CARISOPRODOL 350 MG	90	∞		
CHERATUSSIN AC	240	5		
CHERATUSSIN AC 10 MG/5 ML-100 MG/5 ML	240	7		
CLONAZEPAM 1 MG	06	2		
CLONAZEPAM 2 MG	09	19		
DIAZEPAM 10 MG	30	45	\ \	

	Prescription		Expected Price	Total
Drug Name and Strength	Quantity	Scripts	per Script	Potential Cash
HYDROCODONE BITARTRATE-ACETAMINOPHE 650 MG-10 MG	09	13		
HYDROCODONE BITARTRATE-ACETAMINOPHE 650 MG-10 MG	06	33		
HYDROCODONE BITARTRATE-ACETAMINOPHE 650 MG-10 MG	100	4		
HYDROCODONE BITARTRATE-ACETAMINOPHE 650 MG-10 MG	120	10		
HYDROCODONE BITARTRATE-ACETAMINOPHE 650 MG-10 MG	150	30		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	20	\leftarrow		
	30	22		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	40	က		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	50	Н		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	56	\leftarrow		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	09	09		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	75	2		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	06	129		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	93	\vdash		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	100	16		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	120	95		
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	150	⊣		
HYDROCODONE POLISTIREX-CHLORPHENIRA 8 MG/5 ML-10 MG/5 ML	120	↤		
HYDROCODONE POLISTIREX-CHLORPHENIRA 8 MG/5 ML-10 MG/5 ML	240	⊣		
HYDROMORPHONE HCL 2 MG	09	5		
IOPHEN C-NR 10 MG/5 ML-100 MG/5 ML	240	⊣		
KETAMINE HCL	10	ᆏ		
LORAZEPAM 0.5 MG	30	2		
LORAZEPAM 1 MG	15	. ←		
LORAZEPAM 1 MG	30	⊣		
LORTAB 10/500 500 MG-10 MG	150	4		
LYRICA 75 MG	30	က		
LYRICA 75 MG	09	42		
METHYLPHENIDATE HCL 20 MG	06	⊣		
MORPHINE SULFATE 15 MG	09	2		
OPANA ER 40 MG	09	က		
OPANA ER 40 MG	06	27		

	Prescription		Expected Price	Total
Drug Name and Strength	Quantity	Scripts	per Script	Potential Cash
PROMETHAZINE HCL-CODEINE PHOSPHATE 10 MG/5 ML-6.25 MG/5 ML	240	2,183		
PROMETHAZINE HCL-CODEINE PHOSPHATE 10 MG/5 ML-6.25 MG/5 ML	250	2		
PROMETHAZINE HCL-CODEINE PHOSPHATE 10 MG/5 ML-6.25 MG/5 ML	360	51		
PROMETHAZINE HCL-CODEINE PHOSPHATE 10 MG/5 ML-6.25 MG/5 ML	473	4		
PROMETHAZINE VC W/CODEINE	240	5		
ROBAFEN AC 10 MG/5 ML-100 MG/5 ML	120	⊣		
ROXICODONE 30 MG	06	Н		
ROXICODONE 30 MG	120	7		
SUBOXONE 8 MG-2 MG	30	⊣		
TEMAZEPAM 30 MG	30	⊣		
VICODIN ES 750 MG-7.5 MG	06	⊣		
VICODIN ES 750 MG-7.5 MG	100	Н		
ZOLPIDEM TARTRATE 10 MG	30	4		
ZOLPIDEM TARTRATE 5 MG	30	-		

Peter Nwoke M.D (DEA #FN0019996)

Summary of Prescriptions Issued per MAPS

Prescription Issued Dates: January 1, 2011 through December 31, 2013

	Prescriptions	
Drug Name and Strength	Filled	Quantity
ACETAMINOPHEN-CODEINE PHOSPHATE 120 MG/5 ML-12 MG/5 ML	1	360
ACETAMINOPHEN-CODEINE PHOSPHATE 300 MG-30 MG	24	1,440
ACETAMINOPHEN-CODEINE PHOSPHATE 300 MG-60 MG	34	1,830
ALPRAZOLAM 0.5 MG	2	60
ALPRAZOLAM 1 MG	733	26,895
ALPRAZOLAM 2 MG	103	3,540
AMPHETAMINE SALT COMBO 5 MG	1	30
ASCOMP W/CODEINE 325 MG-50 MG-40 MG-30 MG	1	60
BUPRENORPHINE-NALOXONE 8 MG-2 MG	1	60
BUTALBITAL-ACETAMINOPHEN-CAFFEINE 325 MG-50 MG-40 MG	4	360
BUTALBITAL-APAP-CAFFEINE-CODEINE 325 MG-50 MG-40 MG-30 MG	1	60
CARISOPRODOL 350 MG	75	4,570
CHERATUSSIN AC	5	1,200
CHERATUSSIN AC 10 MG/5 ML-100 MG/5 ML	7	1,680
CLONAZEPAM 1 MG	2	180
CLONAZEPAM 2 MG	19	1,140
DIAZEPAM 10 MG	48	1,530
DIAZEPAM 5 MG	21	630
ENDOCET 325 MG-10 MG	1	120
GABAPENTIN	1	300
GUAIFENESIN/CODEINE PHOSPHATE 10 MG/5 ML-100 MG/5 ML	8	1,920
HYDROCODONE AND CHLORPHENIRAMINE PE 8 MG/5 ML-10 MG/5 ML	6	1,440
HYDROCODONE BITARTRATE-ACETAMINOPHE 325 MG-10 MG	37	3,780
HYDROCODONE BITARTRATE-ACETAMINOPHE 325 MG-7.5 MG	1	90
HYDROCODONE BITARTRATE-ACETAMINOPHE 500 MG-10 MG	3,690	405,856
HYDROCODONE BITARTRATE-ACETAMINOPHE 500 MG-5 MG	19	1,364
HYDROCODONE BITARTRATE-ACETAMINOPHE 500 MG-7.5 MG	2	210
HYDROCODONE BITARTRATE-ACETAMINOPHE 650 MG-10 MG	83	7,860
HYDROCODONE BITARTRATE-ACETAMINOPHE 750 MG-7.5 MG	332	29,509
HYDROCODONE POLISTIREX-CHLORPHENIRA 8 MG/5 ML-10 MG/5 ML	2	360
HYDROMORPHONE HCL 2 MG	5	300
IOPHEN C-NR 10 MG/5 ML-100 MG/5 ML	- 1	240
KETAMINE HCL	1	10
LORAZEPAM 0.5 MG	2	60
LORAZEPAM 1 MG	2	45
LORTAB 10/500 500 MG-10 MG	4	600
LYRICA 75 MG	45	2,610
METHYLPHENIDATE HCL 20 MG	1	90
MORPHINE SULFATE 15 MG	2	120
OPANA ER 40 MG	38	3,550
OXYCODONE HCL 15 MG	11	1,580
OXYCODONE HCL 30 MG	6,101	700,600
OXYCODONE HCL 40 MG	1	180
OXYCODONE HCL-ACETAMINOPHEN 325 MG-10 MG	3	230
OXYCODONE HCL-ACETAMINOPHEN 650 MG-10 MG	3	330
OXYCONTIN 30 MG	2	240
OXYCONTIN 40 MG	1	100
OXYCONTIN 60 MG	1	80
PHENDIMETRAZINE TARTRATE 105 MG	3	270
PHENOBARBITAL 32.4 MG	3	180
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Peter Nwoke M.D (DEA #FN0019996)

Summary of Prescriptions Issued per MAPS

Prescription Issued Dates: January 1, 2011 through December 31, 2013

Prescription	ns
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Drug Schedule	Filled	Quantity
2	6,179	708,480
3	4,244	455,019
4	1,048	39,970
5	3,032	726,152
R	5	660
Totals	14,508	1,930,281